

From glowbugs@theporch.com Fri Apr 26 22:27:57 1996  
Return-Path: glowbugs@theporch.com  
Received: from uro (localhost.theporch.com [127.0.0.1]) by uro.theporch.com  
(8.7.5/AUX-3.1.1) with SMTP id WAA26235; Fri, 26 Apr 1996 22:24:15 -0500 (CDT)  
Date: Fri, 26 Apr 1996 22:24:15 -0500 (CDT)  
Message-Id: <199604270324.WAA26235@uro.theporch.com>  
Errors-To: ws4s@midtenn.net  
Reply-To: glowbugs@theporch.com  
Originator: glowbugs@theporch.com  
Sender: glowbugs@theporch.com  
Precedence: bulk  
From: glowbugs@theporch.com  
To: Multiple recipients of list <glowbugs@theporch.com>  
Subject: GLOWBUGS digest 170  
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas  
X-Comment: Please send list server requests to listproc@theporch.com  
Status: 0

#### GLOWBUGS Digest 170

Topics covered in this issue include:

- 1) Two interesting regens  
by Jeff Duntemann <jeffd@coriolis.com>

-----  
Date: Fri, 26 Apr 1996 09:27:15 GMT  
From: Jeff Duntemann <jeffd@coriolis.com>  
To: glowbugs@theporch.com  
Subject: Two interesting regens  
Message-ID: <199604260927.JAA24873@ns1.indirect.com>

I did a little digging in my files and unearthed two interesting regenerative receiver circuits, both "advanced" circuits with RF amps ahead of the detector.

1. Popular Electronics, 10/59, page 45. This is the radio I mentioned in an earlier post. I built it back in the early Seventies and still have it. A 6SN7 dual triode serves as an untuned RF amp and detector, with a 6V6 as headphone amp. Very nice performer, and less trouble with local AMBC stations than with other simpler circuits I've built. One flaw in the article is that it uses B&W 25-watt Baby transmitter coils with a tickler added, but doesn't describe turn count, diameter, or anything like that. I used a different tuning cap so I had to futz coils up anyway, but be prepared to do a little math and some cut'n'try. Power supply can be made with two 6.3V filament transformers back-to-back with the filament feed from the middle.

2. CQ, 9/48, page 34. More complex circuit, and I've not built it. A 6BA6 pentode RF amp feeds a 6AU6 pentode detector stage. Here the RF amp is tuned, and you need a 2-section variable cap. I would guess you would run into tracking problems if you're not careful, especially since the coils he calls out are solenoid wound on plastic forms and not slug-tuned. A separate peaking variable cap on the RF amp might mitigate this problem. The LC ratio is very high, and he warns that stray capacitance affects the precise resonance values of the coils. The audio stage is a 6SF5 metal triode feeding a 6G6G power amp putting one watt into a PM speaker. Power supply provides about 320 volts. My guess is that with some fooling around this could be a killer radio, and I intuit that slug-tuned coils might make it easier to align. I intend to try it someday when I get some more time.

I didn't search for it last night, but if I recall correctly QST ran an article within the past year about a "modern" regenerative tube receiver, modern in that it has that RF amp ahead of the detector to keep it from radiating.

--73--

--Jeff Duntemann KG7JF  
Scottsdale, Arizona

-----  
End of GLOWBUGS Digest 170

\*\*\*\*\*